IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:) Conf. No.: 6038
     Anthony J. Dezonno   )
)
Serial No.:   10/090,499   ) Filed: March 4, 2002
)
For: INTELLIGENT INTERACTIVE   ) Art Unit: 2617
        VOICE RESPONSE UNIT   )
)
Examiner: Genack, M.   )

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir/Madam:

This is an Appeal from the Final Office Action mailed January 13, 2010, rejecting all of the pending claims. A Notice of Appeal was filed on May 12, 2010. Applicable fees accompany this brief.

Should there be any deficiency in fees in connection with this Appeal, the Commissioner is respectfully requested to and is hereby authorized to charge any such deficiency in fees to Deposit Account No. 23-0920.

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1. <u>REAL PARTY IN INTEREST</u>

The real parties in interest are Aspect Software, Inc. having places of business at 829 Parkview Boulevard, Lombard, Illinois 60148.

2. <u>RELATED APPEALS AND INTERFERENCES</u>

There are no pending appeals, interferences, or judicial proceedings related to, directly affecting or affected by, or having a bearing on the Board's decision in the captioned Appeal.

3. <u>STATUS OF CLAIMS</u>

Claims 1-20 are currently pending, and have been rejected under 35 U.S.C. §103(a) in a Final Office Action dated January 13, 2010 ("Final Office Action"). Claim 21 has been cancelled without prejudice. A Notice of Appeal was filed on May 12, 2010. All currently pending rejected claims 1-20 are being appealed.

4. <u>STATUS OF AMENDMENTS</u>

There were no amendments filed subsequent to the final rejection.

5. <u>SUMMARY OF CLAIMED SUBJECT MATTER</u>

a. Independent Claim 1

Claim 1 recites a method of processing calls in a call processing center (Fig. 1, Ref. No. 10) of an organization that processes calls in support of enterprise activities of the organization (p. 3, lines 10-15). The method comprises the steps of receiving a query in the form of a natural language sentence about the enterprise activities of the

organization from a caller during a call through the call center (10) of the organization (p. 5, lines 20-26; Fig. 2a, Ref. No. 4) and, translating the query into voice extensible mark-up language (p. 5, lines 26-28; Fig 2a, Ref. No. 5). The method further comprises forming a natural language answer to the translated query (p. 5, lines 29-31) within an artificial intelligence engine (Fig. 1, Ref. No. 28) by correlating the query against a plurality of answers and selecting the most probable answer of the call center (p. 4, lines 1-2) wherein the artificial intelligence engine (28) implements second order logic (p. 6, lines 28-29), and incorporates the expertise of a live agent (p. 7, lines 9-11) and a knowledge universe that comprises the enterprise activities of the organization (p. 7, lines 12-13). The call center (10) then provides the natural language answer to the caller to simulate a natural language conversation with the caller without use of menu selection (p.5, line 18 to p. 6, lines 24).

b. Independent Claim 8

Claim 8 recites an apparatus for processing calls in a call processing center (Fig. 1, Ref. No. 10) of an organization that processes calls in support of enterprise activities of the organization (p. 3, lines 10-15). The apparatus comprises means (corresponding structure: ACD 30, Fig. 1) within the call center for receiving a first call and assigning the first call to a live agent (p.2, lines 1-7), means (corresponding structure: VXML Gateway 50) for receiving a query in natural language sentence form about the enterprise activities of the organization from a caller during a second call through the call center (10) of the organization (p. 5, lines 20-26; Fig. 2a, Ref. No. 4), and means (corresponding structure: VXML interpreter 48) for translating the

query into voice extensible mark-up language (p. 5, lines 26-28; Fig. 2a, Ref. No. 5). The apparatus further comprises means (corresponding structure: Automatic Agent 54) for forming a natural language answer to the translated query (p. 5, lines 29-31) within an artificial intelligence engine (Fig. 1, Ref. No. 28) of the call center by correlating the query against a plurality of answers (p. 4, lines 1-2) and selecting the most probable answer wherein the artificial intelligence engine (28) implements second order logic (p. 6, lines 28-29), incorporates the expertise of a live agent (p. 7, lines 9-11), and uses a knowledge universe which is limited to only the enterprise activities of the organization (p. 7, lines 12-13), and means (corresponding structure: speech synthesizer 46) within the call center for providing the natural language answer to the caller enabling a natural language conversation with the caller without use of menu presentation and selection (p. 5, lines 18-p.6 , lines 24).

     c. Independent Claim 15

Claim 15 recites an apparatus for processing calls in a call processing center (10) of an organization that processes calls in support of enterprise activities of the organization (p. 3, lines 10-15). The apparatus comprises a voice extensible mark-up language interpreter (Fig. 1, Ref. No. 48) of the call center adapted to translate a natural language sentence query about the enterprise activities of the organization from a caller during a call into voice extensible mark-up language (p.5, lines 5-10), and an artificial intelligence engine (Fig. 1, Ref. No. 28) of the call center adapted to receive the translated query in VXML form (p. 5, lines 5-10) and adapted to form a natural language answer to the translated VXML query within the artificial

intelligence engine(28) by correlating the query against a plurality of answers and selecting the most probable answer (p. 4, lines 1-2) wherein the artificial intelligence engine implements second order logic (p. 6, lines 28-29), incorporates the expertise of a live agent (p. 7, lines 9-11), and uses a knowledge universe which comprises the enterprise activities of the organization (p. 7, lines 12-13). The apparatus further comprises a speech synthesizer (46) of the call center adapted to provide the natural language answer to the caller to enable a natural language conversation with the caller without use of menu presentation (p. 5, line 18-p. 6, line 24).

d. Independent Claim 20

Claim 20 recites a method of processing calls in a call processing center (10) of an organization (p. 3, lines 10-15). The method comprises the steps of the call center of the organization receiving a text-based question in natural language sentence form from a caller during a call (p. 5, lines 20-26), and converting the text-based question into a metaprogramming language understood by an artificial intelligence engine of the call center (p. 5, lines 26-28). The method further comprises determining a natural language answer to the text-based question (p. 5, lines 29-31) within the artificial intelligence engine (Fig. 1, Ref. No. 28) by correlating the question against a plurality of answers and selecting the most probable answer (p. 4, lines 1-2) adapted to provide answers subjectively focused on the organization based upon incorporating expertise of a live agent (p. 7, lines 9-11) and a knowledge universe limited to an agenda of the organization (p. 7, lines 12-13) enabling the artificial intelligence engine to generalize otherwise indeterminate

questions (p. 8, lines 28-30) wherein the artificial intelligence engine encodes the answer in VXML code (p. 6, lines 1-2). The call center then provides the natural language answer to the caller in the form of audible speech to simulate a natural language conversation with the caller without use of menu presentation (p. 5, line 18-p. 6, line 24).

e. Dependent claim 2

Claim 2 recites the method of processing calls in the call processing center (10) as in claim 1 wherein the artificial intelligence engine (28) utilizes a caller call record including identity and contact history (p. 7, lines 20-27) to enable the artificial intelligence engine to draw inferences to form a context for forming the answer to the query (p. 8, lines 20-23) and wherein the caller call record and a second call are delivered to the artificial intelligence engine at substantially the same time (p. 8, lines 15-18).

f. Dependent claim 9

Claim 9 recited the apparatus for processing calls in the call processing center (10) as in claim 8 wherein the artificial intelligence engine (28) utilizes a callers call record including identity and contact history (p. 7, lines 20-27) to enable the artificial intelligence engine to draw inferences to form a context for forming the answer to the query (p. 8, lines 15-23).

g. Dependent claim 16

Claim 16 recites the apparatus for processing calls in the call processing center (10) as in claim 15 wherein the artificial intelligence engine knowledge universe is limited to a caller call record including identity and contact history (p. 7, lines 20-27) to enable the artificial intelligence engine to draw inferences for forming a context for processing the call (p. 8, lines 20-23) and the artificial intelligence engine generalizes questions to reflect objectives of the organization (p. 8, lines 24-3).

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Appeal is taken from the rejections of Claims 1, 5-8, 13-15 and 18-19 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. Pub. No. 2002/0035474 to Alpdemir ("Alpdemir") in view of Gorin et al., "How May I Help You", October 1999, AT&T Research ("Gorin") and further in view of U.S. Pat. No. 6,640,231 to Andersen et al. ("Andersen"); from the rejection of Claim 20 under 35 U.S.C. §103(b) as being unpatentable over Alpdemir in view of Gorin further in view of U.S. Pat. No. 6,792,086 to Saylor et al. ("Saylor"); from the rejections of claim 2, 9 and 16 under 35 U.S.C. §103(a) as being unpatentable over Alpdemir, Gorin and Andersen further in view U.S. Pat. No. 6,601,048 to Gavan et al. ("Gavan") further in view of U.S. Pat. No. 6,233,333 to Dezonno; from the rejections of Claim 3, 10-11 and 17 under 35 U.S.C. §103(a) as being unpatentable over Alpdemir, Gorin, Andersen and Saylor; from the rejection of claim 4 under 35 U.S.C. §103(a) as being unpatentable over Alpdemir, Gorin, and Andersen further in view of U.S. Pat. No. 6,349,290 to

Horowitz et al. ("Horowitz"); and from the rejection of Claim 12 under 35 U.S.C.

§103(a) as being unpatentbale over Alpdemir, Gorin, Andersen and Saylor further in

view of U.S. Pat. Pub. No. 2003/0084010 to Bigus et al. ("Bigus").

7.   ARGUMENT -- ALL PENDING CLAIMS ARE DISTINGUISHABLE
        OVER ANY COMBINATION OF THE CITED REFERENCES

        a.   Claims 1-19 are distinguishable over the cited references because none of
        the references disclose use of Artificial Intelligence with live agent expertise.

Independent Claims 1, 8 and 15 recite "...forming a natural language answer...the

artificial intelligence engine implements second order logic and incorporates the

expertise of a live agent...". Independent Claim 20 recites

"...the artificial intelligence engine......provide answers subjectively focused on the

organization based upon incorporating expertise of a live agent and a knowledge

universe limited to an agenda of the organization..." Claims 2-7, 9-14 and 16-19 are

dependent upon Claims 1, 8 and 15.

        Thus, all the claims require an artificial intelligence engine with live agent

expertise. The Final Office Action asserts that Alpedmir discloses artificial

intelligence used to process and answer a query at paragraph 0141, lines 7-9 (Final

Office Action, p. 2, lines 22-23). Alpdemir discloses a system using voice recognition

for menu based database retrieval over the telephone. Thus Alpedmir does not use an

AI engine to form natural language answers or simulate a conversation without use of

menu selection. Alpdemir does not disclose the use of an artificial intelligence engine

using a live agent expertise for forming answers to queries from callers as claimed.

The citation to Alpdemir pointed out by the Final Office Action (Paragraph 0141)

merely states "Natural speech processing and artificial intelligence are known in the

art and not described in greater detail here". This does not provide a disclosure of the claimed use of an artificial intelligence engine to answer the call center queries at all. Instead, it states in the first sentence of the paragraph, "Embodiments of the inventive system may desirably incorporate and utilize natural language speech recognition." (paragraph 0141, lines 2-3) Thus, the paragraph is directed to speech recognition not AI generation of answers to queries. The last sentence (paragraph 0141, lines 7-9) merely adds the simple statement that artificial intelligence is known in the art and is not described. This statement that AI is known is not a statement that it is used or a description of how it may be used. The sentence goes on to say that there will be no description of artificial intelligence. Clearly, a mere mention of the existence of AI and a statement that it will not be described is not an enabling disclosure of how it is used to answer queries particularly when the system described is a database retrieval system using menus and prompts (e.g., see, Alpdemir paragraphs 090; 0138; 0144).

The Office Action suggests that the reference to AI in Alpdemir must be read within the context of the invention. However, it is not a question of taking this statement outside a given context, but of reading what is actually disclosed. The statement about AI is no more than an observation that AI is known, it does not state that it should be used or how it should be used or what it should be used for. Such unstated use is merely being assumed in the Office Action. Further, the context of the entire paragraph describes use of natural language speech recognition to extract requests or inquiries ("...the system interprets the user's speech to extract the request or inquiry." Para. 0141, lines 3-5). The most that can be assumed within this context is that the AI is suggested to extract the requests, but the reference does not describe

or suggest any actual application of AI and particularly does not suggest anything related to the claimed use of AI to form <u>answers</u> to the queries. There is no basis for assuming a completely unstated and undisclosed context. The entire paragraph concerns only speech recognition not creation of answers to queries. The context of the entire patent is one of using menus. Thus, even if the description of use of speech recognition to extract requests is assumed to include AI, there is still no disclosure of use of AI to form answers to queries about the activities of the organization as claimed.

Regarding the Office Action reference to the context of the invention, Alpdemir describes a database data retrieval system which permits menu based data retrieval from the database through voice commands wherein voice commands are converted to text and used to retrieve the data (paragraphs 0138, 144). There is no use of AI to form answers to questions taught or suggested, nor is AI in this simple data base retrieval context suggested. Paragraphs 088-091 of Alpdemir describe use of prompts and a menu to access directory assistance which is a mere data retrieval function devoid of any suggestion of use of AI to form natural language answers to questions. In fact, Alpdemir teaches away from the claimed invention because while expressly recognizing the existence of AI, it fails to suggest its use to answer questions and instead teaches use of traditional menu presentation and selection to accomplish traditional data retrieval from a database. Thus, there is absolutely no enabling disclosure of using AI to form natural language answers and enable natural language conversational exchanges with the caller. At most, there is a non-enabling hint that AI could be used in the speech recognition discussed in paragraph 0141.

The Final Office Action concedes that Alpdemir does not expressly disclose receiving a natural language sentence query, forming a natural language answer to the query wherein the AI engine implements second order logic and incorporates the expertise of a live agent, or enabling a natural language conversation without use of menu selection. (Final Office Action; p. 3, lines 1-7). However, the Final Office Action asserts that Gorin does so at page 1, second column, lines 23 to page 2, second column, line 12 (Final Office Action, p. 3, lines 8-18). However, Gorin does not teach the use of artificial intelligence to determine natural language answers to queries. Gorin concerns automatic routing, and uses natural language recognition, prompts, and form filling to determine the call type for call routing but does not use AI incorporating live agent expertise, or attempt to answer users queries. "Such a call router need not solve the user's problem." (Gorin, p. 1, Col. 1, third paragraph). Further, Gorin does not mention use of an artificial intelligence engine. Thus, Gorin does not teach use of artificial intelligence to simulate a natural language conversation. The Final Office Action, conceding that Gorin does not mention AI, asserts that Gorin's system is functionally an AI engine (p. 17, lines 12-19). However, the only support provided is examples of natural language phrases. This, however, only establishes use of speech recognition in the limited system described which merely tries to recognized a limited number of predetermined service requests for routing purposes. Thus is not a description of AI engine functionality. Gorin does not mention AI because it does not use AI and does not need it.

In addition, Gorin does not use or have a need to use the expertise of a live agent. Since Gorin merely tries to recognize one of 14 predetermined service

requests (p. 3, Col. 1, first paragraph), it does not have use for agent expert artificial intelligence. The call routing of Gorin is pre-agent activity. The call is first routed by Gorin; then after routing and assignment to a live agent, a live agent, or the live agent simulator of the invention would handle the customer questions. The live agent expertise is not used or needed until after the call has been routed. Thus, Gorin's call routing does not suggest use of AI with live agent expertise. Further, Gorin teaches passing the user to a live agent when live agent capability is needed (Gorin, p.1, col. 7, last line to Col. 2, line 1). Thus, Gorin teaches a simple speech recognition system for routing calls, not an AI system incorporating live agent expertise for answering queries. Therefore, neither reference teaches the claimed use of AI, incorporating the expertise of a live agent, or implementing of second order logic. There is no need to implement these AI features in systems which do not use or need AI. The Final Office Action concedes that Alpdemir and Gorin do not disclose AI second order logic but asserts that Andersen does in various passages. However, none of the passages describe or mention on AI engine with second order logic. None of the cited reference teaches or attempts to use agent expertise or AI logic to answer queries because they either use menus (Alpdemir) or are concerned only with routing (a pre-agent activity). Thus, all pending claims are distinguishable over the cited references.

> b. All pending claims are distinguishable over the cited references because none of the references discloses an Artificial Intelligence engine using a knowledge universe comprising enterprise activities.

Independent claims 1, 8, 15, and 20 also call for an artificial intelligence engine with a knowledge universe comprising enterprise activities of the

organization. This is also not disclosed by any of the references of record. The Final Office Action cites passages of Alpdemir describing that retrieval requests can pertain to activities of the business. However, these passages do not discuss or even mention the knowledge universe of an AI engine and do not limit such AI knowledge base to the enterprise activities as claimed. Rather, they refer only to data types that may be asked for (implying some of the data that is in the database), but this is unrelated to the knowledge universe of an AI engine (which is not present in Alpdemir).

In addition, independent claim 8 and 20 limit the knowledge universe to only enterprise activities which is also not disclosed by the cited references. Independent claim 20 also further limit the knowledge universe to call records for forming a context for processing the.call, and to agenda of the organization to provide subjective answers focused on the organization. As described, in the specification (e.g., p. 8, para 4) this limited universe provides unique advantages. The Final Office Action relies on Alpdemir and Gorin, which do not describe use of this limited universe in an AI engine or in fact, any implementation of an artificial intelligence engine to form answers to inquiries. Thus, the independent claims 1, 8, 15, and 20 and all the dependent claims distinguish over Alpdemir, Gorin, Andersen, and the other references of record for at least the above reasons.

> c. Claims 2, 9 and 16, are further distinguishable over the cited references because none of the references discloses the claimed use of an AI engine using call records to form a context for answers to caller queries.

Claims 2, 9, and 16 have been rejected as obvious over Alpdemir, Gorin and Andersen in view of Gavan et al. ("Gavan") and Dezonno. As discussed above, Alpdemir and Gorin do not teach use of an artificial intelligence engine to form

answers to caller queries, and neither does Gavan. Gavan discloses a system for processing event records and uses an AI engine for pattern recognition in the records for detecting fraud. Thus, while Gavan teaches detection of patterns in event records, it does not teach or suggest use of artificial intelligence to answer queries from callers about the enterprise activities as claimed. Thus, none of the references disclose this feature. Claims 2, 9, and 16 also now call for the AI engine to draw inferences from call records to form answers which is also not taught by the cited references. Further, claim 2 calls for delivery of call records and a second call to the artificial intelligence engine at substantially the same time. The Office Action asserts that Dezonno discloses identifying a call record to be delivered from one ACD to another ACD and that the call record and call are delivered simultaneously at Col. 7, lines 30-44. However, Dezonno delivers the call to the agent 18C and the records to a terminal display 22C. Thus, they are delivered to two different destinations, not to a single engine or location (i.e., the artificial intelligence engine). Gavan merely teaches use of multiple items. Thus, neither reference teaches delivery of a call and call records to the same location, or to an AI engine. Thus, claim 2, which is dependent upon allowable claim 1, is believed to be further distinguishable over any combination of the cited references.

In addition, claims 2, 9, and 16 call for use of call records to form a context for forming answers to the caller queries. Alpdemir and Gorin do not disclose an AI engine forming a context for answering queries or for drawing inferences. The Final Office Action refers to Alpdemir which clearly does not describe an AI engine but instead describes traditional data retrieval using the name and location. There is no

AI engine described in Gorin, and no mention of drawing inferences on an AI engine. There is no AI engine, no AI function and no AI context described. In fact, the opposite is taught by Alpdemir and Gorin, simply traditional data retrieval and speech recognition. Andersen also fails to teach drawing inferences from call records to form a context for forming answers to caller queries. Gavan, concerned with the entirely different issue of looking for fraud patterns in event records, also fails to teach or suggest this feature. This use of artificial intelligence on call records to detect fraud patterns in entirely different from using call records to generate context for answers to caller questions about the enterprise activities. Dezonno discloses identifying a call record but does not disclose using the call record to form a context for an AI engine to form answers. Thus, neither Alpdemir, Gorin, Andersen, Gavan, nor Dezonno disclose the claimed feature of using the call records to draw inferences to form the context in an AI engine for forming answers to the caller queries. Accordingly, claims 2, 9, and 16 are further distinguishable over the combination of the references of record.

8.   CLAIMS APPENDIX

An appendix containing a copy of the claims involved in the appeal is attached.

9.   EVIDENCE APPENDIX

NONE. There is no evidence submitted by applicants and relied on in this appeal.
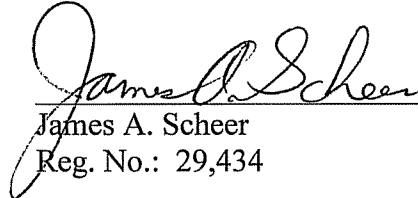
10.   RELATED PROCEEDINGS APPENDIX

NONE. There are no related proceedings.

Favorable consideration of this Appeal and allowance of the captioned

application are respectfully requested.

Respectfully submitted

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Dated: October 12, 2010

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CLAIMS APPENDIX

1.   A method of processing calls in a call processing center of an organization that processes calls in support of enterprise activities of the organization, such method comprising the steps of:

receiving a query in the form of a natural language sentence about the enterprise activities of the organization from a caller during a call through the call center of the organization;

translating the query into voice extensible mark-up language;

forming a natural language answer to the translated query within an artificial intelligence engine by correlating the query against a plurality of answers and selecting the most probable answer of the call center wherein the artificial intelligence engine implements second order logic, and incorporates the expertise of a live agent and a knowledge universe that comprises the enterprise activities of the organization; and

the call center providing the natural language answer to the caller to simulate a natural language conversation with the caller without use of menu selection.

2.   The method of processing calls in the call processing center as in claim 1 wherein the artificial intelligence engine utilizes a caller call record including identity and contact history to enable the artificial intelligence engine to draw inferences to form a context for forming the answer to the query and wherein the caller call record

and a second call are delivered to the artificial intelligence engine at substantially the same time.

3. The method of processing calls in the call processing center as in claim 1 wherein the step of forming an answer further comprises forming the answer in the form of VXML code within the AI engine.

4. The method of processing calls in the call processing center as in claim 1 wherein the artificial intelligence engine duplicates prior successful conversation strategies using identity and contact history of the caller thereby mimicking a live agent.

5. The method of processing calls in the call processing center as in claim 4 wherein the artificial intelligence engine utilizes the expertise and inputs associated with a live agent.

6. The method of processing calls in the call processing center as in claim 1 wherein the step of receiving the query further comprises detecting the query within at least one of an html document and an email.

7. The method of processing calls in the call processing center as in claim 1 wherein the artificial intelligence engine knowledge universe is limited to only the

enterprise activities of the organization enabling the artificial intelligence engine to generalize otherwise indeterminate inquiries.

8.   An apparatus for processing calls in a call processing center of an organization that processes calls in support of enterprise activities of the organization, such apparatus comprising:

means within the call center for receiving a first call and assigning the first call to a live agent;

means for receiving a query in natural language sentence form about the enterprise activities of the organization from a caller during a second call through the call center of the organization;

means for translating the query into voice extensible mark-up language;

means for forming a natural language answer to the translated query within an artificial intelligence engine of the call center by correlating the query against a plurality of answers and selecting the most probable answer wherein the artificial intelligence engine implements second order logic, incorporates the expertise of a live agent, and uses a knowledge universe which is limited to only the enterprise activities of the organization; and

means within the call center for providing the natural language answer to the caller enabling a natural language conversation with the caller without use of menu presentation and selection.

9. The apparatus for processing calls in the call processing center as in claim 8 wherein the artificial intelligence engine utilizes a callers call record including identity and contact history to enable the artificial intelligence engine to draw inferences to form a context for forming the answer to the query.

10. The apparatus for processing calls in the call processing center as in claim 8 wherein the means for forming an answer further comprises means for forming the answer in the form of VXML code within the AI engine.

11. The apparatus for processing calls in the call processing center as in claim 10 wherein the artificial intelligence engine is not measurably objectively accurate in responding to queries.

12. The apparatus for processing calls in the call processing center as in claim 11 wherein the artificial intelligence engine utilizes the expertise and inputs associated with a live agent and incorporates forward and backward chaining.

13. The apparatus for processing calls in the call processing center as in claim 8 wherein the means for receiving the query further comprises means for detecting the query within at least one of an html document and an email.

14. The apparatus for processing calls in the call processing center as in claim 15 wherein the artificial intelligence engine implements a subset of second order logic.

15. An apparatus for processing calls in a call processing center of an organization that processes calls in support of enterprise activities of the organization, such apparatus comprising:

a voice extensible mark-up language interpreter of the call center adapted to translate a natural language sentence query about the enterprise activities of the organization from a caller during a call into voice extensible mark-up language;

an artificial intelligence engine of the call center adapted to receive the translated query in VXML form and adapted to form a natural language answer to the translated VXML query within the artificial intelligence engine by correlating the query against a plurality of answers and selecting the most probable answer wherein the artificial intelligence engine implements second order logic, incorporates the expertise of a live agent, and uses a knowledge universe which comprises the enterprise activities of the organization; and

a speech synthesizer of the call center adapted to provide the natural language answer to the caller to enable a natural language conversation with the caller without use of menu presentation.

16. The apparatus for processing calls in the call processing center as in claim 15 wherein the artificial intelligence engine knowledge universe is limited to a caller call record including identity and contact history to enable the artificial intelligence engine to draw inferences for forming a context for processing the call and the artificial intelligence engine generalizes questions to reflect objectives of the organization.

17. The apparatus for processing calls in the call processing center as in claim 15 wherein the artificial intelligence engine forms the answer in VXML code using information from web page documents and incorporates VXML responses into documents that are delivered to the caller in response to the call.

18. The apparatus for processing calls in the call processing center as in claim 15 wherein all calls to the call processing center are routed to the interpreter and wherein only exceptional calls are re-routed to a live agent.

19. The apparatus for processing calls in the call processing center as in claim 15 wherein the means for receiving the query further comprises a web site adapted to detect the query within an e-mail.

20. A method of processing calls in a call processing center of an organization, such method comprising the steps of:

the call center of the organization receiving a text-based question in natural language sentence form from a caller during a call;

converting the text-based question into a metaprogramming language understood by an artificial intelligence engine of the call center;

determining a natural language answer to the text-based question within the artificial intelligence engine by correlating the question against a plurality of answers and selecting the most probable answer adapted to provide answers subjectively focused on the organization based upon incorporating expertise of a live agent and a knowledge universe limited to an agenda of the organization enabling the artificial intelligence engine to generalize otherwise indeterminate questions wherein the artificial intelligence engine encodes the answer in VXML code;

the call center providing the natural language answer to the caller in the form of audible speech to simulate a natural language conversation with the caller without use of menu presentation.

21. (Cancelled)